

ATTACHMENT J03

JAN 2005

# Fort McPherson Gas Distribution System

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## **J03 Fort McPherson Gas Distribution System**

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### **J03.1 Fort McPherson Overview**

Fort McPherson is a U.S. Army Installation located in the City of Atlanta, four miles southwest of downtown. It covers 487 acres of well-landscaped grounds. Fort Mac operates the sub post: Fort Gillem, GA (10 miles from Atlanta). Fort Mac was named after Maj. Gen. James Birdseye McPherson, a Union Army general killed during the battle for Atlanta in 1864. Fort Mac came into existence in the summer of 1885 and received its first garrison, nine batteries of the 4th Artillery Regiment, in 1889. Today, it is the home for Headquarters, Forces Command, whose mission is maintaining the readiness of active Army and reserve units throughout the United States and its territories. It is also the headquarters for the 3rd U.S. Army and Army Reserve Command. The climate of Fort Mac is mild to hot, most of the year.

#### **J03.1.1 Gas Distribution System Fixed Equipment Inventory**

The Fort McPherson Gas distribution system comprises all appurtenances physically connected to the distribution system from the point in which the distribution system enters the Installation, and/or Government ownership currently, starts to the point of demarcation defined by the real estate instruments. Generally, the point of demarcation will be the building footprint. Fort McPherson purchases its natural gas requirements from Atlanta Gas Light Company (AGL), under interruptible gas schedule I-21 Commercial Rate. Fort Mac purchases its natural gas requirements from Atlanta Gas Light Company ("AGL"), under interruptible gas Schedule I-21 Commercial Rate. A Propane Air Plant located at Fort Mac was constructed, and is owned and operated by a contractor, Aneresco, Inc. The natural gas or the propane air mixture (during natural gas interruption) is distributed throughout the Installation through a distribution system with pipes ranging in size from less than two inches to six inches in diameter. The Propane Air Plant is not included in this contract. The total length of the natural gas distribution system is 50,500 linear feet, serving about 103 buildings. The system was originally installed in the 1950s; however, some of the system was installed as late as 1986 and 1996. The inventory is assumed to be approximately 90 percent complete. The Offeror shall base the proposal on site inspections, information in the technical library, other pertinent information, and to a lesser degree the following description

##### **J03.1.1.1 Description**

Fort Mac redistributes the purchased natural gas from AGL within the Installation. The natural gas is supplied by the local gas company and connects to the distribution system at one point. As summarized in Table 2.1, there is approximately 50,500 linear feet (9.6 miles) of pipe ranging in size from less than 2 inches to 6 inches in diameter. The distribution system serves approximately 103 buildings located throughout the Installation. The original natural gas distribution system was constructed during the 1950s; the exiting gas system was either constructed or replaced during 1978, 1986 and 1996. During 1996, approximately 1,000 linear feet of 4-inch pipe was installed. The system consists primarily of polyethylene pipe however, there are areas in the original installation areas which are of various materials.

Fort Mac has a propane air plant originally constructed in July 1992 with a capacity of 334 Therms per hour. In 1995, the plant was modified to increase the capacity to 1000 Therms per hour. The service of this propane air plant, provides Fort McPherson to purchases gas at interruptible rate schedule. The Propane plant is owned and operated by a contractor, Aneresco, Inc, under a 15 year

contract. The plant is approximately 12 years old. The contractor will operate the system during the existing contract. The ownership will revert to the Government at the end of the contract period and will retain ownership of the system after the contract period.

The function of the propane system is to provide gas supplies during any outages of normal gas service. The intent is that before a gas curtailment of the gas is imposed, the supplier provides notice to the installation. The government then informs the propane contractor. The propane contractor sends his personnel to activate the propane system which supplies an air & propane mixture during the curtailment period to satisfy Fort McPherson's demand load. The plant vaporizes stored propane (from outdoor tanks) and mixes it with air to get comparable BTU value to natural gas and supplies it to the gas distribution system. The propane contractor takes the propane system offline at the termination of the curtailment period. The Propane Air Plant is not included in this contract.

### J03.1.1.2 Inventory

**Table 1.A.** and **Table 1.B.** provides a general listing of the major Gas system fixed assets for the Fort McPherson Gas distribution system included in the purchase. The system will be sold in an "as is, where is" condition without any warrant, representation, or obligation on the part of the Government to make any alterations, repairs, or improvements. All ancillary equipment attached to and necessary for operating the system, though not specifically mentioned here in, is considered part of the purchased utility.

**PLEASE NOTE:** Fort McPherson will require all existing steel pipe to be replaced with high-density polyethylene (HDPE) pipe over a 3-year timeframe. Map data contained in the Technical Library should contain information to identify existing steel pipe. (See Paragraphs C.3.1 and C11.1). Please note that Fort McPherson contains a significant amount of development and live vegetation.

**TABLE 1.A.**

1.A. Fixed Inventory gross quantities

#### Fort McPherson Natural Gas Distribution System Distribution Mains / Pipe

Pipe Size	Inventory
<2"	11,200
2"	9,940
2 ½"	500
3"	15,780
4"	6,510
6"	6,525
Total	50,444
Bldg. Services	103
Main Valve	0
Main Mtr/Reg.	0

**TABLE 1.B.**

1.B. Fixed Inventory area location

**Ft. McPherson National Gas Distribution System Inventory**

Pipe Size	Site Sheet 1	Site Sheet 1A	Site Sheet 1B	Total
<2"	8,040		3,160	11,200
2"	5,490		4,450	9,940
2 ½"	500		0	500
3"	10,245		5,535	15,780
4"	4,650	1,010	850	6,510
6"	6,525			6,525
Bldg. Services (100'@1"+Reg.+Vlv.+Rsr.)	103			103
Main Valve				
Main Mtr/Reg.				
Pipe Total, Ft.	35,450	1,010	13,995	50,455
Installed	1986	1996	1978	

**Acronyms:**

Bldg = Building

Reg = Regulator

Mtr = Meter

Vlv = Valve

Rsr = Riser

### **J03.1.2 Gas Distribution System Non-Fixed Equipment and Specialized Tools Inventory**

**Table 2** lists other ancillary equipment (spare parts) and **Table 3** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment and tools. The successful Contractor shall provide any and all equipment, vehicles, and tools, whether included in the purchase or not, to maintain a fully operating system under the terms of this contract.

**TABLE 2**

2. Spare Parts

Gas Distribution System Fort McPherson

Quantity	Item	Make/Model	Description	Remarks
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No spare parts will be available.

**TABLE 3**

3. Specialized Equipment and Vehicles

Gas Distribution System Fort McPherson

Description	Quantity	Location	Maker
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No specialized equipment or vehicles for maintenance of the Fort McPherson Gas distribution system will be transferred to the new owner of the system.

### J03.1.3 Gas System Marking, Manuals, Drawings, and Records Inventory

The Offeror will become compliant with and shall utilize the One Call utility marking service and shall be responsible for marking all Offeror-owned facilities within the Installation. **Table 4** lists the manuals, drawings, and records that will be transferred with the system.

**TABLE 4**

4. Manuals, Drawings, and Records

Gas Distribution System Fort McPherson

Quantity	Item	Description	Remarks
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Fort McPherson maintains a limited collection of technical manuals, drawings, and records on the installed components of the Gas distribution system. This information will be transferred to the new owner during the transition period. System maps will be available in the technical library.

## J03.2 Current Service Arrangement

Fort McPherson currently purchases Gas from a supplier and distributes through the installation pipes. The current installation gas usage is estimated to be 67,446 DTH per year. As required by this contract, the Contractor shall demonstrate the ability to meet and shall establish any and all requirements to provide gas distribution service to Fort McPherson.

## J03.3 Secondary Metering

The Installation will require secondary meters for internal billings of their reimbursable customers, utility usage management, and energy conservation monitoring. The Contractor shall assume full ownership and responsibility for future secondary meters IAW Clause C.3.

### J03.3.1 Existing Secondary Meters

**Table 5** provides a listing of the known, existing (at the time of contract award) secondary meters that will be transferred to the Contractor. The Contractor shall provide meter readings once a month for all secondary meters IAW H.5 and J01.5 below.

**TABLE 5**

5. Existing Secondary Gas Meters  
Gas Distribution System Fort McPherson

Location Description	CustomerID
Rear of Quarters	1E-70168459
Rear of Quarters	1W-701268681
Rear of Quarters	2e-70168671
Rear of Quarters	2W-70168670
Rear of Quarters	3E-70168468
Rear of Quarters	3W-70168470
Rear of Quarters	4E-70168683
Rear of Quarters	4W-26783317
Rear of Quarters	5- 50245699
Rear of Quarters	6E-70080608
Rear of Quarters	6W-70168701
Rear of Quarters	7E-70168674
Rear of Quarters	7W-70168469
Rear of Quarters	8E-710686672
Rear of Quarters	8W-70168673
Rear of Quarters	9E-701686788
Rear of Quarters	9W-70168702
Rear of Quarters	10 26865387
Rear of Quarters	11E-70168367
Rear of Quarters	11W-70168391
Rear of Quarters	12E-70168392
Rear of Quarters	12W-70168792
Rear of Quarters	13E-70168389
Rear of Quarters	13W-70168368
Rear of Quarters	14E-70168366
Rear of Quarters	14W-70168390
Rear of Quarters	15E-70168667
Rear of Quarters	15W-70168474
Rear of Quarters	18- 70168784
Rear of Quarters	19E-70168472
Rear of Quarters	19W-70168668
Rear of Quarters	20-70168785
	B128-82823002
	B129-82146639
	B130-83047783
	B131-81288754
	B131ac-81288490
	B132-31158068
	B-135-31158064
Building	B136B-26794116
Building	B137B-70546868
Building	B138B-95259859
Building	B-139 70546878

### J03.3.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters at each natural gas service at Fort McPherson. A partial list of new meter locations is listed below in **Table 6**. New secondary meters shall be installed IAW Clause C.17, Transition Plan. After installation, the Contractor shall maintain and read these meters IAW Clauses C.3, H.5, and J01.5 below.

**TABLE 6**

6. New Secondary Meters

Gas Distribution System Fort McPherson

Meter Location	Meter Description
New natural gas meters, where not currently existing, will be required for each existing service including a new meter for each bay per warehouse. Included below are customer identification numbers of locations for new natural gas meters.	

Location ID #	B-207-83036253
	B-238A-30995943
	B-238B-78706403
	B-248-92556326
	B-250-82823016
	B-312-12279333
	B-315-229552
	B-328-E-328
	B-340-80766554
	B-348-E-348
	B-363A-92516566
	B-363AC-
	B-363AD-7586130
	B-363AE-01264856
	B-363AG-
	B-363B-92567736
	B-363BB-17872264
	B-363C-012648545
	B-365-744X900026
	B-366-36020808
	B-368-95889570
	B-380-7786051

	B-400-80556618
	B-401-80556619
	B-409-E409
	B-421-0321572
	B-448-30586908
	B-475-12269931
	B-476-92679342
	B-477-12269931
	B-478-
	B-479-
	B-480-12269926
	B-482E-
	B-482W-
	B-483-
	B-499-02358704
	B-504-37042035
	B-514-32258067
	B-608-721X070794
	B-65-33017844
	LAKE#1
	LAKE#2-31174073
	LAKE#3-31174103
	LAKE3-31158060
	QTRS-136-26794116
	QTRS-137-70546868
	QTRS-138-95259859
	QTRS-139-70546878
	QTRS-140-70546847
	QTRS-141-26785013
	QTRS-142-75544685
	QTRS-410-95614435
	QTRS-506A-70168789
	QTRS-506B-7068704
	QTRS-507A-70168700
	QTRS-507B-70080609
	QTRS-508A-70168705



	QTRS-508B-70168787
	QTRS-509A-70168476
	QTRS-509B-70168471
	QTRS-510A-701688807
	QTRS-510B-26785011
	QTRS-515A-70169107
	QTRS-515B-70168381
	QTRS-523A-26785014
	QTRS-523B-26783316
	QTRS-524A-70168688
	QTRS-524B-70168804
	QTRS-526A-70168675
	QTRS-526B-70168882
	QTRS-527A-70169106
	QTRS-527B-21705426
	QTRS-528A-70168786
	QTRS-528B-70168808
	QTRS-532-35632906
	QTRS-533A-70168676
	QTRS-533B-70168461
	QTRS-534A-70168680
	QTRS-534B-70168794
	QTRS-535A-70168809
	QTRS-535B-70168466
	QTRS-536A-99087603
	QTRS-536B-70080614
	QTRS-537A-70168796
	QTRS-537B-21705429
	QTRS-538A-70080613
	QTRS-538B-70168781
	QTRS-601A-70168460
	QTRS-601B-70168679
	QTRS-602A-70168465
	QTRS-602B-93577107
	QTRS-603A-70168795
	QTRS-603B-70168697

	QTRS-604A-70168695
	QTRS-604B-70169793
	QTRS-605A-70168692
	QTRS-605B-70168696

### J03.4 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

Invoice (IAW G.2). The Contractor's monthly invoice shall be prepared with data items as indicated below. Invoices shall be submitted by the 25<sup>th</sup> of each month for the previous month. Invoices shall be submitted to the Contracting Officer's designee. (This information will be provided upon award.)

**Outage Report:** The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall include the following information for Scheduled and Unscheduled outages:

***Scheduled:*** Requestor, date, time, duration, facilities affected, feedback provided during outage, outage notification form number, and digging clearance number.

***Unscheduled:*** Include date, time and duration, facilities affected, response time after notification, completion times, feedback provided at time of outage, specific item failure, probability of future failure, long term fix, and emergency digging clearance number.

Outage reports shall be submitted by the 25<sup>th</sup> of each month for the previous month. Outage reports shall be submitted to the Contracting Officer's designee. (This information will be provided upon award.)

**Meter Reading Report:** The monthly Meter Reading Report shall include; meter location, location identification number, installation, meter number, meter reader name, meter reading date (month, date), present reading, previous reading, consumption. Meter reading reports shall be submitted by the 15<sup>th</sup> of each month for the previous month. Meter reading reports shall be submitted to the Contracting Officer's designee. (This information will be provided upon award.)

### J03.5 Energy Savings Projects

There are currently no existing energy saving projects for the Gas distribution system at Fort McPherson.

### J03.6 Service Area

IAW Clause C.4, Service Area, the service area is defined as all areas within the Fort McPherson boundaries.

### J03.7 Off-Installation Sites

Lake Allatoona Recreation Site is an offsite area located approximately 45 miles north of Fort McPherson included under CLIN 0005 and CLIN 0006 and as described in Sections J05 and J06.

## J03.8 Specific Transition Requirements

IAW Clause C.17, Transition Plan, **Table 7** lists service connections and disconnections required upon transfer, and **Table 8** lists the improvement projects required upon transfer of the Fort McPherson Gas distribution system.

**TABLE 7**

7. Service Connections and Disconnections  
Gas Distribution System Fort McPherson

Location	Description
Required service connections and disconnections will be provided to the contractor, as the requirements become known.	

**TABLE 8**

8. System Improvement Projects  
Gas Distribution System Fort McPherson

Project Location	Project Description
All existing steel pipe shall be replaced with high density polyethylene (HDPE) pipe within a 3-year timeframe.	

## J03.9 Gas Distribution System Points of Demarcation

The point of demarcation is defined as the point on the distribution system where ownership changes from the Grantee to the building owner. This point of demarcation will typically be at the point the utility enters a building structure or the load side of a gas meter adjacent to the building structure. The table below identifies the type and general location of the point of demarcation with respect to the building for each scenario. During the operation and maintenance transition period, concurrence on specific demarcation points will be documented during the joint inventory of facilities.

**TABLE 9**

9. Points of Demarcation  
Gas Distribution System Fort McPherson

Point of Demarcation (POD)	Applicable Scenario	Sketch
POD is the downstream side of the natural gas meter.	Natural gas service to the building is metered.	<p>The sketch illustrates the Point of Demarcation (POD) for natural gas service to a building. It shows a horizontal line representing the 'Distribution Line' with arrows indicating flow direction. A vertical line represents the 'Service Line' entering a 'Structure'. A 'Meter' is located on the Service Line. The 'Point of Demarcation' is marked at the downstream side of the Meter. Arrows indicate the flow of gas from the Distribution Line through the Meter into the Structure.</p>

Point of Demarcation (POD)	Applicable Scenario	Sketch
POD is the downstream side of the pressure regulator.	Natural gas service to the building is regulated but not metered.	
POD is the downstream side of the closest apparatus to the exterior of the facility.	More than one apparatus is connected to the service line feeding the facility.	
POD is the closest shutoff valve to the exterior of the building.	No meter or regulator exists at the facility. Shutoff valve located within 25 feet from the exterior of the building.	
POD is the five-foot line exterior to building footprint. Install a shutoff valve within 5-feet of the building exterior.	No meter, regulator or closest shutoff valve exists at the facility.	No Sketch Required.

## J03.10 Unique Points of Demarcation

The following table lists anomalous points of demarcation that do not fit any of the above scenarios.

**TABLE 10**

10. Unique Points of Demarcation

Natural Gas Distribution System Fort McPherson

Building No.	Point of Demarcation Description
None	

## **J03.11 Service Response Times**

The Offeror shall respond to normal/routine outages within 1 hour. Emergency situations will require 30-minute response. Please indicate in the Technical Proposal (Volume I) how the Offeror will consistently insure meeting these response time requirements.